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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,958	12/04/2001	Sakuya Tamada	09792909-5284	2769
26263	7590	09/06/2005	EXAMINER	
SONNENSCHN NATH & ROSENTHAL LLP			DINH, TAN X	
P.O. BOX 061080			ART UNIT	
WACKER DRIVE STATION, SEARS TOWER			PAPER NUMBER	
CHICAGO, IL 60606-1080			2653	

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/006,958	TAMADA ET AL.	
	Examiner	Art Unit	
	TAN X. DINH	2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1) The amendment filed 8/15/2005 is acknowledged. Claim 2 has been canceled.

2) The drawings were received on 8/15/2005. These drawings are acceptable.

3) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4) This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5) Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over UTSUNOMIYA et al (6,154,437).

UTSUNOMIYA et al discloses an optical disk as claimed in claim 1, comprises a substrate (Fig.2, substrate 2), a data recording layer (Fig.2, recording layer 4); a dielectric part (Fig.2, dielectric layers 31, 32), a light-transmitting layer (Fig.2, light-transmitting layer 2. In this case, the substrate 2 functions as light-transmitting layer), wherein data is recorded by applying a laser beam having wavelength of 380nm-450nm (column 17, lines 54-58) to the data recording layer through the light-transmitting layer, the dielectric part comprises a *nitride layer contacting the data recording layer* and an *oxide layer* or a *fluoride layer* laid on the nitride layer, and the nitride layer has a thickness of at most 10nm (see column 9 , line 49 to column 10, line 20), except to specifically show that (i) the recording layer is organic material, (ii) the light-transmitting layer adhered to dielectric part with an adhesive agent and the reflectance of the beam is 15% to 25% at initial condition (before data is recorded) and is 0% to 10% after data is record. It would have been obvious to someone within the level of skill in the art at the time of the invention was made to use an organic recording layer and adhered the light-transmitting layer to dielectric layer by an adhesive agent as claimed, the rationale is as follows:

(i) The organic recording layer are old and widely used in the optical recording art for storing information data (see MASUHARA, US 6,440,333, column 7, lines 58-67; MAEDA et al, US 5,371,730, figure 7, organic recording layer 3, column 12, lines 47-67; ESHO et al, US 4,504,548, abstract, etc.,) and

(ii) in figures 1-3 and column 7, lines 20-34 and column 14, lines 13-18, UTSUNOMIYA et al teaches the feature of using adhesive agent in optical disk for adhering two layers (the adhesive agent are old and widely used in optical recording medium, the adhesive agent can be used on any layers at any suitable positions for adhering the layers together to form a solid optical storage medium, further, the adhesive may be a hot melt adhesives, a UV curing adhesive, a room temperature curing adhesive, or alternatively, a pressure sensitive adhesive, etc.,), and

(iii) the reflectance of the beam irradiates on the optical disk at 15% to 25% at initial condition (before data is recorded) and at 0% to 10% after data is record is standard conditions of next generation of high density optical disk

Therefore, one of ordinary skill in the art at the time of the invention was made would have been motivated to use an organic recording layer, an adhesive agent for adhering the light-transmitting layer to dielectric layer and the reflectance

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condition before and after recording data in UTSUNOMIYA et al's optical disk in order to increase the density of the optical recording medium.

6) Applicant's arguments filed 8/15/2005 have been fully considered but they are not persuasive.

First, Applicant states that the reference of Utsunomiya does not shows a light transmitting layer and the substrate in Utsunomiya is not function as a light transmitting layer. Applicant is directed to Utsunomiya's figures 1-6, the in order to reproduce information data from recording layer 4, the light beam must focus on recording layer 4, the light cannot goes through protecting layer 6 (detail structures and material of protective layer 6 is provide in column 14, lines 4-12). Further, if the light could go through protecting layer 6, the light beam will be *reflected* at *reflective layer 5* and the data on recording layer 4 cannot be reproduced.

Further, in column 7, lines 27-34, Utsunomiya teaches that his optical recording medium could be a double sides optical disk and protective layer 6 is located between two sides. Therefore, the light beam cannot go through protective layer 6 which cannot focus on recording layer 4 for performing reproducing process. The light beam, in fact, irradiates to substrate 2, focus on recording layer 4, the light beam, thereafter, reflects by reflective layer 5 to

photo-detector for processing the signal (it is further noted that the feature of using substrate as light transmitting layer are widely used in optical recording art).

Second, applicant states that " Utsunomiya does not teach or suggests the light transmitting layer adhered to dielectric part which contacts the data-recording layer ". Applicant is directed to Utsunomiya's figure 1, the light transmitting layer (substrate 2) is adhered to dielectric part 31 which contacts the data-recording layer 4.

For those reasons, claim 1 is still rejectable as shown above.

7) THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply

expire later than SIX MONTHS from the mailing date of this final action.

8) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9) Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAN XUAN DINH whose telephone number is (571)272-7586. The examiner can normally be reached on MONDAY-FRIDAY from 8:00AM to 5:00PM.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TAN DINH
PRIMARY EXAMINER

September 1, 2005